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ABSTRACT

Characteristics of hyperactive children, techniques used to quantify levels of activity, possible causes of high activity levels, and parenting/teaching techniques that may reduce such high levels of movement are considered. Hyperactivity is defined as a high degree of physical activity Florida teachers who volunteered to use the 14 recommended reactions) of hyperactivity along with corresponding treatment strategies (including drugs and diet) are listed. Treating the whole problem, instead of just medicating the child, is advocated. (SW)

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HYPERACTIVITY - CHARACTERISTICS, POSSIBLE CAUSES, AND INTERVENTION STRATEGIES

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The purpose of this paper is to present in plain English, characteristics of hyperactive children, techniques used to quantify levels of activity, possible causes of high activity levels, and parenting/teaching techniques that may prove effective in reducing such high levels of movement.

Articles about hyperactivity abound in the literature. Literally thousands of articles on the subject can be readily found in medical, psychological, penal, sociological, educational, and governmental journals and reports. Many of these articles cover the broad spectrum of studies about hyperactivity (Interagency Collaborative Group on Hyperkineses, 1976; Keogh, 1971; Loney, 1980; Ross, 1976; Walsh, 1979; Wunderlick, 1973). Others deal more specifically with the evaluation of different methodologies used in its treatment. These cover such techniques as behavior management (Ayllon and Others, 1975; Flynn and Rapoport, 1976; O'Leary and Others, 1976; and O'Leary and O'Leary, 1977), environmental control (Cruickshank and Others, 1961), diet/allergy therapy (Feingold and Feingold, 1979; Mayron, 1979; Rapp, 1977 and 1979; and Williams and Others, 1978), drug therapy (Cole, 1975; Gittleman-Klein and Others, 1976; and Loney and Others, 1979), and relaxation/biofeedback (Bhatara, 1979; Braud and Others, 1975; Martin and Hershey, 1977; and Shapiro and Others, 1973).

The literature is filled with contradictions regarding the definition, measurement, etiology, and results of treatment relating to hyperactivity.

Incidence figures for hyperactivity range from three to fifteen percent of the school population. Boys are reported as being hyperactive five to nine times more often than girls.

For the purpose of this paper, hyperactivity will be defined as a high degree of physical activity across varying environmental conditions. The characteristics that are commonly associated with students who are labeled hyperactive include:

Short attention span
Impulsivity
Visual-motor difficulties
Incoordination
Academic difficulties
Lies easily
Low frustration level
Muscular tension
Distractibility
Irritability
Constantly beginning tasks
Constantly abandoning tasks
Demands teacher attention
If with teacher one-on-one is all right; if not, won't work
Short-lived friendships
Older friends (can cope with their movement)
Younger friends (can bully them)
Unusual sleep habits
Jumps to conclusions
Careless errors
Impulsively advances into groups
Forgetfulness
Perseveration
Low self-esteem
Poor social skills

Several checklists have been developed to make decisions and/or quantify the movement levels of students. Poggio and Salking concluded that "no single measure can be recommended for use in screening large groups of children with a resultant high degree of confidence in the identification/selection data"(1979, p. 22). The diagnosis/quantification of hyperactivity should be considered judgmental and subjective in nature.

The best results reportedly are obtained through the use of a team approach for the assessment, diagnosis, treatment, and management of hyperactivity (pediatrician, school psychologist, teacher, parents, and social worker).

The literature reports several checklists (Behavior Rating Scale by Peters and Others, 1973; Hyperkinesis Parent Questionnaire by Rapp, 1979; Pupil Behavior Rating Scale by Gearheart, 1981; Rating Scales for Hyperkinesis by Davids, 1971; Teacher Rating Scale by Connors, 1969; and Vogel Pediatric Stress Assessment by Vogel, 1981). The authors have utilized both the Rapp and Gearheart scales and have found them to be satisfactory when combined with observations of the child, teacher comments, parent interview information, and examination by a pediatric neurologist. Rapp's book (1979) has proved extremely useful in working with parents and teachers. It is, perhaps, the most complete single source of information explaining the use of diet therapy for the treatment of hyperactivity in children. It includes step-by-step instructions on how to carry out a one-week multiple food allergy diet that helps identify specific foods to which a child may be allergic.

When one is trying to identify possible causes and treatment strategies of high levels of movement in children, one must examine biological, psychological, and social/environmental factors such as:

Possible Causes	Treatment Strategies
Low self-image:	Use unconditional positive regard
Allergic reactions	Medical treatment/drugs/diet
Other dietary deficiencies	Medical treatment/drugs/diet
Muscular tension	Relaxation/biofeedback/stretching exercises
Immature language development	Receptive/expressive language therapy
Auditory figure-ground problems	Reduce extraneous sounds/study carrel

Visual figure-ground problems	Reduce extraneous visual stimuli/mask reading material/ study carrel
Tactile-kinesthetic figure-ground	Use padded chair
Personal space needs	Give sufficient room
Tactile defensiveness	Do not touch needlessly
Time structure problems	Instruction in meaningful use of time/use timer
Rhythm problems	Work on slow/medium/fast
Hot room (moves to stay awake)	Reduce room temperature
Ill-fitting underwear	Proper clothing
Worms or fleas	Proper hygiene/medical treatment
Learned behavior	Train role model
Brain damage	Medical treatment/drugs

In addition to the above specific treatment strategies, try to utilize instructional materials that enhance interest and provide immediate feedback to the child, build in periodic and meaningful movement, provide structure and consistency whenever possible, ignore unwanted behavior and reinforce desired behavior, and change materials and tasks frequently.

Experience in working with children within a learning disability clinic setting has made it obvious that parents and teachers are desperately searching for possible answers to the ever-present problem of disruptive levels of movement of some students. Unfortunately, all too often the first line of "defense" utilized for a child displaying hyperactive behavioral symptoms is to resort to medication. This is especially true if the parents and teachers are persistent in their efforts for relief. As parents and professionals it is important to become familiar with the characteristics of the hyperactive student and how to use checklists and behavioral notes, chart behavior and activity levels, identify possible causes of the high activity levels, choose possible intervention strategies that have proven effective, and select further readings on the subject. Only then can we begin to look at the high activity levels of children as possibly belonging to, or being

the result of, many individuals and factors in the child's environment. Only then can we begin to think about the "shared ownership" of the many variables affecting the activity levels of a hyperactive child. And finally, only then can we begin to treat the whole problem instead of just medicating the child for "his/her problem".

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CLD: Council for Learning Disabilities. Department of Special Education University of Louisville, Louisville, KY 40208.
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